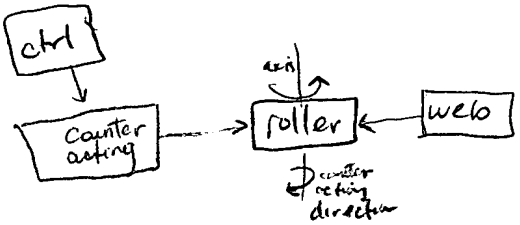

WHAT IS CLAIMED IS:

1. A web tension measurement device comprising:

a roller for a contacting a web of material, the roller having an axis of rotation, the axis being moveable in a first direction by the web;

a counteracting device connected to the roller, the counteracting device for forcing the roller in a second direction opposite the first direction; and

a controller connected to the counteracting device for measuring the web tension.

2. The web tension measurement device as recited in claim 1 wherein the roller is a liquid cooled roll.

3. The web tension measurement device as recited in claim 1 wherein the counteracting device is a motor.

4. The web tension measurement device as recited in claim 1 wherein the controller is a solid state device.

5. The web tension measurement device as recited in claim 1 further comprising a plurality of lever arms, each lever arm mechanically linked to the counteracting device, the plurality of lever arms supporting the roller.

6. The web tension measurement device as recited in claim 1 further comprising a pivot shaft mechanically linked to the counteracting device.

7. The web tension measurement device as recited in claim 1 further comprising a plurality of drive sprockets, each drive sprocket mechanically linked to the counteracting device.

8. The web tension measurement device as recited in claim 7 further comprising a belt connected to at least one of the drive sprockets.

9. The web tension measurement device as recited in claim 1 wherein the counteracting device has a shaft.

10. A method for measuring tension in a web comprising the steps of:

running a web over a roller, the roller having an axis movable in a first direction;

counteracting the movement of the axis in a second direction opposite the first direction; and

measuring a counteracting force or a variable so as to be able to determine a web tension.

11. The method for measuring tension as recited in claim 10 wherein the roller remains stationary.

12. The method for measuring tension as recited in claim 10 wherein the roller is rotatable in a lever or lever arm about a pivot axis.

13. The method for measuring tension as recited in claim 12 further including the step of moving the axis of the roller based on a web compensator algorithm.